



## **NCSD SEWER EXTENSION PROJECT CLOSE OUT REQUIREMENTS**

### **SUBMITTALS REQUIRED**

- ☐ Two (2) hard prints and one mylar sepia as-built drawings, each signed and sealed.
- ☐ AutoCAD copy of as-built on a cd.
- ☐ Signed PDF of as-built on a cd.
- ☐ GIS data (see below).
- ☐ Easement plats and documents. The easement plats must have the Districts stamp at the time of recording. Five copies of unrecorded or Two copies of recorded plats are to be provided.
- ☐ All necessary lien waivers.
- ☐ Attorney's opinion letter.
- ☐ Final inspection documentation.
- ☐ Final CCTV inspection of sewer system.
- ☐ Pump Station close out submittals if applicable (see below)
- ☐ Completed/Signed Bill of Sale (**submitted at the time of project permitting**).
- ☐ Maintenance Bond, Cashier's Check, or Certified Letter of Credit in the amount indicated in the sewer extension contract sent to the owner. Typical fifteen percent of engineer's construction cost estimate.
- ☐ Engineer's Certification Letter.

### **AS-BUILT DRAWINGS.**

Two (2) sets of "D" size (36" x 24") paper copies and one (1) mylar sepia. All must be signed, sealed, and contain the following information:

- ☐ Use of the State Plane Coordinates NAD 83 shall be used. Only information pertinent to the wastewater facilities being dedicated to the District should be shown.
- ☐ All written numbers will be 1/8" minimum.
- ☐ A revision block shall be provided with the dates and descriptions of any revisions to the as-built.
- ☐ The size and type of materials of all lines shall be indicated.
- ☐ All easements to be conveyed shall be shown and labeled accordingly, as well as any property deeded to the District.
- ☐ All lot and block numbers shall be shown and drawn to graphic scale. Scale shall be no smaller than 1" equals 50'.
- ☐ Sewer stationing to be provided on all manholes and service lines.
- ☐ Service line horizontal offset distances from nearest property line.
- ☐ Service line lengths.
- ☐ All access roads to pump stations shall be shown.



- ☐ Actual locations of all force mains shall be shown and referenced to permanent structures.
- ☐ Force Main profiles if applicable.
- ☐ The rim and invert elevations of all manholes shall be indicated on the plan and profile sheets (measurements shall be accurate to within +/- one hundredth of a foot). Line slopes between adjoining manholes shall also be shown on plan and profile sheets.
- ☐ Each page of the as-built shall be signed and sealed by a registered engineer and land surveyor.
- ☐ All roads shall be shown and have the center line shown.
- ☐ Stated Vertical Datum and necessary conversion factors.
- ☐ Locations of Sidewalks and Water/Storm Utilities for field reference.
- ☐ TMS numbers for lots if available at the time of as-built preparation.

### **GPS GIS DATA**

This data will be in State Plane Coordinates NAD 83 International feet, and all OPS points delivered will be sub-foot accuracy. The GIS data will be delivered as an ESRI Personal Geodatabase with each feature class metadata filled out. The District will provide a sample Personal Geodatabase.

### **CCTV INSPECTION SUBMITTAL**

- ☐ Televised, recorded video inspections are required on all new gravity sewer mains at the owner/developer's expense prior to inspections by NCSD. Lateral inspections will be required on all systems permitted after 07/01/2016.
- ☐ Videos must be in Granite XP or Granite Net utilizing NASSCO version 4 format or higher.
- ☐ Videos must be provided to NCSD on a CD, DVD, or other approved media with the media cover labeled accordingly with the project name, sewer section(s), video date(s), and name of the company performing the video inspection service.
- ☐ Video submittals must include contact information for the video inspection company to include company name, inspection operator's name, company address, company phone, and company email address. NCSD will provide GIS manhole numbers before the start of the inspection.
- ☐ NCSD may video the sewer line at its expense at any time within the 2-year construction warranty period before it expires.



## **PUMP STATION CLOSE OUT SUBMITTAL**

### **Documentation**

- ☐ Hoist / Crane OSHA Certification (for projects with hoists).
- ☐ Back Flow Prevention Device Test.
- ☐ Real Property Plat.
- ☐ Title to Real Estate.
- ☐ Certified Factory Test for Generator.
- ☐ Five Year Warranty for Generator.
- ☐ **TWO (2)** complete O&M Manuals w/ parts list for Generator.
- ☐ **TWO (2)** complete O&M Manuals w/ parts list for Telemetry System.
- ☐ **TWO (2)** complete O&M Manuals w/ parts list for Macerator.
- ☐ **TWO (2)** complete O&M Manuals w/ parts list for Pumps.
- ☐ **TWO (2)** Catalog cuts and Wiring diagrams.
- ☐ **TWO (2)** sets of Impeller information for Pumps.
- ☐ **TWO (2)** Performance Tests for Pumps.
- ☐ Pump Performance (Drawdown test) Startup Report.
- ☐ Generator Startup Report.
- ☐ Macerator Startup Report.
- ☐ Flow meter Startup Report.
- ☐ Telemetry Startup Report.
- ☐ Building Permit Inspection Reports.
- ☐ Electrical Inspection Reports.
- ☐ Soil Compaction Test Reports.
- ☐ Concrete Test Reports.
- ☐ Electric Account Information (Meter Number, Account Number, Account Holder).
- ☐ Water Account Information (Account Number, Account Holder) – due once Water System Permit to Operate is issued.

### **Spare Parts - Pumps and Control Panel**

- ☐ One set of wear rings.
- ☐ One of each type relay.
- ☐ One pump starter.
- ☐ One pump alternator.



- ☐ One float switch.
- ☐ One of each type pilot light.
- ☐ One box of each type lamp.
- ☐ One box of each type fuse.
- ☐ One set of cable grommets.
- ☐ One each size and type fuse furnished.
- ☐ One of each size and type control relay furnished.
- ☐ Two of each size and type of selector switch furnished.
- ☐ Five of each size and type of indication lamp furnished.

**Spare Parts - Generator**

- ☐ Standard spare parts package as recommended by manufacturer.

**Spare Parts - Macerator**

- ☐ Standard spare parts package as recommended by manufacturer.

**ACCEPTANCE FOR OPERATION**

Upon completion of the sewer project, the Commission shall consider adoption of a resolution of acceptance. The District will thereafter be responsible for all operation and maintenance of the facilities accepted. An O&M letter will be sent to SCDHEC. A copy of the signed resolution and O&M letter will be sent to the developer's engineer.

For the system to be adopted the project and resolution will be presented first at the NCSD Committee meeting which occurs on the 4<sup>th</sup> Monday of the month. On the 2<sup>nd</sup> Monday of the following month the project and resolution is approved at the NCSD Commission meeting if all requirements have been met and the O&M letter can then be generated. To be considered for a committee meeting all project documentation and submittals must be complete and submitted by the 3<sup>rd</sup> Monday of the month preceding the Committee meeting.

**CONNECTION AND INSPECTION PERMIT**

The District will charge a connection and inspection permit fee in accordance with the applicable rates in effect at the time of purchase. Connection permits cannot be purchased for a new system until the Permit to Operate from SCDHEC has been received. Prior to the connection of the sewerage facilities to the District's Wastewater system, the Applicant shall purchase one sewer connection and inspection permit for each lot or parcel of land which is:

- A) Owned by the Applicant.
- B) Shown on the plan submitted under Section 6.03 of the NCSD Use Resolution.



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C) Served directly by the sewers installed under the agreement/contract.